

FIG. 5 is a truth table of control signals in a demodulator;

FIGS. 6 (A)-(B) is a timing chart provided for explanation on operation of a prior art demodulator; and

FIGS. 7 (A)-(D) are explanatory views of a technical concept of Viterbi decoding.

IN THE CLAIMS:

Please cancel claims 1-8 as originally filed in the international application and add new claims 9-14 as follows:

9. (New) A demodulator in a digital broadcasting receiver for receiving a digital broadcast by layered transmission system, said demodulator comprising:

pseudo-data inserting means for inserting pseudo-data for decoding a TMCC signal immediately before and/or immediately after said TMCC signal;

wherein said pseudo-data inserting means comprises a serial/parallel converter for serial/parallel converting a base band signal demodulated by a demodulation circuit, a pseudo-data generator for generating said pseudo-data, and a selector for selecting output data of said serial/parallel converter and said pseudo-data outputted from said pseudo-data generator.

10. (New) The demodulator according to claim 9, wherein said decoding is Viterbi decoding.

11. (New) The demodulator according to claim 9, wherein said pseudo-data at least includes related fixed data maintaining a convoluted time sequential relationship.

12. (New) The demodulator according to claim 9, wherein said pseudo-data further includes fixed data and a synchronization word for frame identification.

13. (New) The demodulator according to claim 9, further comprising:

an accumulator to which said output data of said serial/parallel converter are written at a half of a transmission rate and from which the written data are read out at the same rate as said transmission rate to be outputted to said selector.

14. (New) A method of demodulation for use in a digital broadcasting receiver for receiving a digital broadcast by layered transmission system, said method comprising a step of inserting pseudo-data for decoding a TMCC signal immediately before and/or immediately after said TMCC signal, wherein said inserting step comprises steps of serial/parallel converting a base band signal demodulated by a demodulation step, generating said pseudo-data, and selecting output data of said serial/parallel converting step and said pseudo-data outputted from said pseudo-data generating step.

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